

PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program Implementation Grant, Round 2, 2013

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|-----------------------|--|----------------------------|--------------|
| Applicant | Upper Mokelumne River Watershed Authority | Amount Requested | \$ 2,174,587 |
| Proposal Title | Mokelumne/Amador/Calaveras Integrated Regional Water Management Plan Proposition 84, Round 2 Implementation Grant Proposal | Total Proposal Cost | \$ 3,847,514 |

PROJECT SUMMARY

The proposal consists of three projects with the following benefit types: aging infrastructure, water quality, and resource conservation: (1) Lake Camanche Lateral Replacement Project – Phase 2; (2) Ponderosa Way Restoration Project – Phase 1; and (3) Camanche Area Regional Water Supply Project – Phase 1.

PROPOSAL SCORE

| Criteria | Score/ Max. Possible | Criteria | Score/ Max. Possible |
|--|-------------------------|----------------------------|-------------------------|
| Work Plan | 15/15 | Technical Justification | 10/10 |
| Budget | 5/5 | | |
| Schedule | 5/5 | Benefits and Cost Analysis | 15/30 |
| Monitoring, Assessment, and Performance Measures | 4/5 | Program Preferences | 10/10 |
| Total Score (max. possible = 80) | | | 64 |

PROPOSAL SUMMARY

WORK PLAN

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. There are three projects included in this proposal, each emphasizing aging infrastructure, water quality, and resource conservation. Proposal objectives are listed and connection of the proposal to objectives of the IRWM Plan is discussed. The proposal's objectives are discussed, as are the project statuses. Maps showing relative project locations are included. The applicant provides a detailed description of each project, and includes a set of tasks that implement each project. The tasks in the work plan outline include task descriptions, deliverables, and status. The work plan tasks do collectively implement each project in the proposal, and the work plan includes a complete list of permits and statuses. The work plan outline includes data management and monitoring deliverables.

BUDGET

The budgets for all the projects in the proposal have detailed cost information, the costs are reasonable, and all of the budget categories are thoroughly supported. The projects budgets are presented in narrative and tabular form, and a summary budget table is provided. The tasks in the budget are consistent with tasks in the work plan and schedule.

SCHEDULE

The criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale. The tasks are consistent with the tasks described in the Work Plan and Budget. The applicant provides a combined schedule for the overall project, as well as additional schedules for the project's three components. Given task descriptions in the Work Plan, the Schedule seems reasonable. The first construction cycle for the Proposal is May 2014. Each of the projects is ready to be constructed and most of their environmental documentation has been completed.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is fully addressed, but documentation or rationale is incomplete or insufficient. The explanation of the monitoring section is thorough in addressing each project element. However, further justification for what existing conditions are and how the project will be measured to meet the goals of each project can be further explained. Some targets do not measure or quantify the required metrics in order to meet the goals and desired outcomes. For example, the identified monitoring targets need to be quantifiable to be able to measure the improvement to water quality, increased recreational activities, improved water supply, and a reduction in water loss in the service lateral system.

TECHNICAL JUSTIFICATION

The proposal is technically justified to achieve the claimed benefits and is fully supported by well described physical documentation that demonstrates the technical adequacy of the projects. The applicant provided information that identifies and describes the physical benefits of each project included in the proposal and includes existing data and studies, recent and historical conditions, without-project conditions, and detailed descriptions of project benefits. Maps are included to show relative location of projects to groundwater basins and DAC regions, as well as tables that track annual project physical benefits for avoided water losses, reduction of chlorine discharge to the environment, reduction in energy demands, avoided groundwater pumping, reduction in magnesium and iron loading to the environment, miles of trails with improved access, and increased recreational use.

BENEFITS AND COSTS ANALYSIS

Collectively the Proposal is likely to provide a medium level of benefits in relationship to cost, but the quality of the analysis and clear and complete documentation is lacking. The Proposal includes 3 projects for water supply, water system upgrade, and restoration. Project 3 dominates the proposal cost. Benefits are estimated as the avoided cost of \$1.75 million per year (2012 dollars) to truck 56 acre feet (AF) per year of potable water for the next fifty years. This is equivalent to claiming over \$30,000 per AF in benefits. However, trucked water cannot be considered to be the lowest-cost, realistic, long-term alternative resulting in a substantial overstatement of monetized benefits. Also, the benefits table only accounts for 56 AF per year of the new water supply rather than the full 561 AF (183 million gallons) per year. The avoided groundwater pumping as a result of the replacement of inefficient fixtures is valued using \$94 per AF groundwater pumping cost. The assumed savings per fixture is not well documented and appears to be much higher than estimated by other applications. Non-monetized benefits include health and safety improvements for a DAC, reduced discharges of wellhead treatment byproducts, improved groundwater management, and improved reliability. The project will also enable the generation of benefits from future phases.

Monetized benefits from project 1 include avoided repair costs, pumping costs, and chlorination costs. Cost of emergency repair is based on ratios of planned to emergency repair from national surveys, and applied to the cost per lateral replacement of the proposed project. It is unclear why the actual cost of recent repairs is not used. Benefits of

project 2 include recreation and avoided sediment costs. Recreational use assumptions are not well documented. Non-monetized benefits for these two small projects are described, but in part overlap benefits are quantified.

The applicant provided a good explanation of costs. Water supply benefits are substantially overstated because of extraordinarily high alternative costs assumed. The benefits analysis does not appear to account for all of the water supply provided. Other benefits appear to be plausible but are not well documented in some cases.

PROGRAM PREFERENCES

The applicant claims that six program preferences and eight statewide priorities will be met with project implementation. However, applicant demonstrates high degree of certainty, and adequate documentation for only five of the Preferences claimed: (1) Include regional projects or programs; (2) Effectively integrate water management programs and projects within hydrologic region identified in the CWP; RWQCB region or subdivision; or other region or sub-region specifically identified by DWR; (3) Effectively resolve significant water-related conflicts within or between regions; (4) Address critical water supply or water quality needs of disadvantaged communities within the region; and (5) Effectively integrate water management with land use planning.